

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

June 17, 2005

TO: K. Fortenberry, Technical Director
FROM: D. Grover and W. Linzau, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending June 17, 2005

Plutonium Finishing Plant (PFP): A container of plutonium material was loaded into a glove box which exceeded the box criticality mass limit posting. Two additional criticality controls remained in place maintaining the requirement for double contingency. The event was caused when the safeguards value for plutonium content was used instead of the more conservative criticality value to verify compliance with the mass limit. The critique of the event identified that the causes included infrequent material movements by this work crew and a poor understanding of which of the two plutonium values on the material label to use for criticality program compliance. Also, there was not a clear designation of responsibility for verifying the mass value for this activity. The activity involved an interface between deactivation workers and a production support laboratory scientist.

The site rep attended the annual emergency response classroom training at PFP. The training incorporated lessons learned from facility and site drills as well complex wide occurrences, e.g., the Rocky Flats glove box fire. The training also dealt with the potential for multiple alarms with conflicting response actions. Of particular emphasis, was the need to evaluate the risks in the immediate area and building emergency director (BED) instructions instead of the standard alarm response. For example, in one drill the BED issued a take cover order, a fire alarm then actuated and personnel left the building despite not being in immediate risk from the fire.

Tank Farms: Power was lost to the 200 East tank farms on Tuesday morning for approximately 90 minutes when a 13.8 kV feeder was lost. The cause of the power loss is still under investigation. The loss of power was an abnormal event but did not trigger a limiting conditions of operation due to the restoration of power within 24 hours. The shift manager ordered the evacuation of the tank farms and then shifted control operations to the 242A evaporator because it was not impacted by the loss of power. It appears that appropriate actions were taken to respond to and recover from the event. However, several areas for improvement were noted, particularly those related to the field work restoration process. For example, it was noted that poor coordination of re-entry surveys caused delays of hours in restoring operations to some of farms.

Public Meeting: The 4th annual State of the Hanford Site Public Meeting was held on June 15, 2005, in Richland, Washington. The meeting was attended by approximately 200 people, including workers, contractor senior management, DNFSB site representative, and the general public. Presentations were made by the Richland Operations Office, Office of River Protection, United States Environmental Protection Agency, Washington State Department of Ecology, and the Hanford Advisory Board. The various speakers addressed the significant accomplishments of the last year as well as the need to prioritize cleanup efforts that take into account projected budget cuts. Another topic discussed was the need to establish clear cleanup endpoint criteria.